

STATE OF NEW HAMPSHIRE

# **DRAFT 2016 Section 303(d) Surface Water Quality List**

May 8, 2017



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## CHAPTER 1 INTRODUCTION

### 1.1 PURPOSE

The Federal Water Pollution Control Act [PL92-500, commonly called the Clean Water Act (CWA)], as last reauthorized by the Water Quality Act of 1987, requires each state to submit a list of impaired waters to the US Environmental Protection Agency (USEPA) every two years. The document is typically called the “303(d) List,” so named because it is a requirement of Section 303(d) of the CWA. The 303(d) List includes surface waters that are:

- Impaired or threatened by a pollutant or pollutant(s).
- Not expected to meet water quality standards within a reasonable time even after application of best available technology standards for point sources or best management practices for nonpoint sources.
- Require the development of a comprehensive water quality study (i.e., called a Total Maximum Daily Load or TMDL study) that is designed to meet water quality standards.

### 1.2 ASSESSMENT METHODOLOGY AND TERMS

The 2016 Section 305(b) and 303(d) Consolidated Assessment and Listing Methodology (CALM) describes in detail how surface water quality assessment decisions were made in fulfillment of 40 CFR 130.7(b)(6). The CALM also includes descriptions and definitions of the many terms used to assess surface waters. A copy of the CALM is provided at <http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>. Readers are strongly encouraged to read the CALM before reviewing assessments as it will help one to better understand and interpret assessment results.

### 1.3 DATA

The 2016 assessments are supported by more than 1 million grab samples and several million datalogger results. These data records were collected from more than 2,000 stream sites, 2,500 lake sites, and 640 marine sites and include over 180 water-quality and ecological parameters. Most of the data are available from the NHDES data warehouse at [http://www2.des.state.nh.us/OneStop/Environmental\\_Monitoring\\_Menu.aspx](http://www2.des.state.nh.us/OneStop/Environmental_Monitoring_Menu.aspx) or by contacting NHDES.

Additionally, the Surface Water Quality Assessment Viewer has been updated for the 2014 assessment cycle ([http://www2.des.state.nh.us/WaterShed\\_SWQA/SWQA\\_Map.aspx](http://www2.des.state.nh.us/WaterShed_SWQA/SWQA_Map.aspx)). This tool was developed for users to:

- 1) View the spatial extent of assessment units.
- 2) Identify where sampling data was collected.
- 3) Access the watershed report cards.

- 4) Run reports to access the base data and water quality data summaries for the Aquatic Life and Primary Contact (i.e. Swimming) designated uses in the 2016 assessment cycle.
- 5) View the extent of the USEPA 2017 MS4 General Permit Areas.

#### **1.4 ASSESSMENT UNITS**

Assessment Units (AU) are the basic unit of record for conducting and reporting water quality assessments.

To help determine the extent and/or location of each AU, visual aids such as maps are useful. To that end, a web mapping application was built and can be launched from the watershed Report Cards page [http://www2.des.state.nh.us/WaterShed\\_SWQA/WaterShed\\_SWQA.aspx](http://www2.des.state.nh.us/WaterShed_SWQA/WaterShed_SWQA.aspx)

For those wishing to download the base GIS for use with the more common GIS software products AUs are available in Geodatabase format. All GIS layers may be accessed through the Department's FTP site by using the following instructions:

- 1) Go to this address using a web browser:  
<ftp://pubftp.nh.gov/DES/wmb/WaterQuality/2016/> (some browsers may require you to cut and paste this link directly).
- 2) At the login window, click on the box in the lower left hand corner labeled "Login Anonymously."
- 3) The user name will then be automatically filled in with the word "Anonymous."
- 4) Type in your email address in the Email Address block.
- 5) Then click on the Log On button.
- 6) The [GIS] folder should appear containing the files described above.

#### **1.5 TECHNICAL SUPPORT DOCUMENT FOR THE GREAT BAY ESTUARY**

The complexity of the Great Bay Estuary presents a number of assessment challenges. In addition to the CALM (see section 1.2 above) a Technical Support Document for the Great Bay Estuary Aquatic Life Use Support Assessments, 2016 305(b) Report/303(d) List has been prepared to provide supplemental information regarding New Hampshire's 305(b)/303(d) assessments of the Great Bay Estuary. This document is meant to provide additional information about how the water quality status of each of the 19 assessment zones was determined. Specifically, this document addresses the water quality data used to determine if the estuary meets the Aquatic Life designated use.

## 1.6 **NHDES SURFACE WATER QUALITY ASSESSMENT WEBSITE**

The department's surface water quality assessment website (<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>) contains the following materials helpful for review of the draft 303(d) List:

- Consolidated Assessment and Listing Methodology (CALM) (PDF)
  - Request for Comments on the CALM (PDF)
- 2016, Draft 303(d) List Content Introduction (PDF)
  - Appendix A.1 - 2016, Draft 303(d) List (PDF)
  - Appendix A.2 - 2016, Draft 303(d) List (EXCEL)
  - Appendix A.3 - Map of Draft 303(d) Impaired Waters (PDF)
  - Waters Removed from the 303(d) List (PDF)
  - Waters Added Since the 303(d) List (PDF)
  - Request for Comments on the 2016, Draft 303(d) List (PDF)
  - Appendix B - New Hampshire's Long-term 303(d) Vision and Comments Opportunity (PDF)
- Other related materials
  - Technical Support Document for the Great Bay Estuary Aquatic Life Use Support Assessments, 2016 305(b) Report/303(d) List (PDF)
  - GIS Layers for the 2016 Assessment (PDF)
  - Impairments Removed Since the 2014 305(b) (PDF)
  - Impairments Added to the 2016 305(b) (PDF)
  - Surface Water Quality Mapper and Watershed Report Cards (Website)

## **Section 303(d) List FORMAT**

### **1.7 OVERVIEW**

The Section 303(d) List is provided in Appendix A. As previously mentioned, the Section 303(d) List only includes waters that are impaired or threatened by pollutants that require Total Maximum Daily Load studies (TMDLs). Consequently, the 303(d) List represents a subset of all impaired waters as not all impairments require a TMDL.

The List is sorted by waterbody type and then Assessment Unit ID number or AUID (each waterbody has a unique AUID). Each record includes the impaired designated use in that assessment unit, the cause of impairment, the probable source of impairment, and an estimated TMDL priority. Prior to reviewing the assessments, the reader is encouraged to review the 2016 Consolidated Assessment and Listing Methodology, which includes detailed explanations of the various methods used to derive the results described below.

## **APPENDIX A: Section 303(d) List**

- Appendix A.1 - 2016, Draft 303(d) List (PDF)
- Appendix A.2 - 2016, Draft 303(d) List (EXCEL)
- Appendix A.3 - Map of Draft 303(d) Impaired Waters (PDF)



## **APPENDIX B: 303(d) Long-Term Vision**